

REMARKS

I. Formalities

Applicant has claimed foreign priority in this Application, and has submitted a certified copy of the priority document to the PTO on August 9, 2001. Thus, the Examiner is requested, in the next action, to indicate that: (1) a claim for foreign priority has been made; and (2) that the certified copy of the priority document has been received.

Applicant thanks the Examiner for considering the references cited with the *Information Disclosure Statements* filed August 9, 2001 and January 29, 2004.

Applicant thanks the Examiner for indicating that the Formal Drawings filed August 9, 2001 are accepted.

II. Status of the Application

Claims 1-12 are all the claims pending in the Application, as claims 11-12 are hereby added. Claims 1-10 stand rejected.

III. Written Description Rejection

The Examiner has rejected claims 1, 2, 3, 6, 7 and 8 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement.

As an initial matter, it has long been held that "[t]here is a strong presumption that an adequate written description of the claimed invention is present when the application is filed. *In re Wertheim*, 541 F.2d 257, 263, 191 USPQ 90, 97 (CCPA 1976). Thus, "the PTO has the initial burden of presenting evidence or reasons why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims." *In re Wertheim*, 541 F.2d

257, 263, 191 USPQ 90, 97 (CCPA 1976). Further, what is conventional or well known to one of ordinary skill in the art need not be disclosed in detail. See *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d at 1384, 231 USPQ at 94. MPEP § 2163(I)(A) further describes these propositions.

Regarding the Examiner's rejections as a whole, it appears that the Examiner is alleging that one of ordinary skill in the art at the time of the invention (hereinafter "one of skill") would not have known how to calculate a cross-sectional area of a cable or of a cable holder of different shapes and sizes in view of the instant Application. Applicant strongly disagrees, and respectfully submits that it is well within the abilities of one of skill to calculate cross-sectional areas of various shapes. Thus, there is no need to describe in detail such calculations in the instant Application.

III.(A) "Calculating An Area Necessary For Clamping The Designated Cables" Is Fully Supported By The Specification As Filed

The Examiner takes the position that the method of "calculation of an area necessary for clamping the cables is not described," alleging that "in the case of an elongated rectangular cable clamp, the area of the cable clamp by itself would not be sufficient to determine whether the cable clamp would suffice to clamp the cables."

Applicant respectfully disagrees, for at least the following reasons. First, independent claim 1 recites "calculating an area necessary for clamping the cables based on a result" of the calculation of "a cross-sectional area of each designated cable." Thus, this method provides a necessary area based upon the cross-sectional area of cables.

Second, Applicant directs the Examiner to, *inter alia*, the last full paragraph on page 10 of the specification, which indicates that “[t]he cross section of each cable passing through the cable clamp is first calculated, and based on the calculated result, the area necessary for clamping the three cables is calculated in consideration of a predetermined margin (i.e., design allowance).” Applicant respectfully submits that this portion of the specification adequately describes (*i.e.*, so that one of skill would understand) one embodiment of the invention in accordance with the claimed method.

Third, the Examiner’s conclusory statement that the comparative area method recited in the instant Application would not work an “elongated rectangular cable clamp” is unsupported by any analysis, so Applicant cannot comment on the Examiner’s underlying rationale.

Fourth, Applicant respectfully submits that it is simply improper for the Examiner to create a hypothetical arrangement of features, and then to allege that the specification does not describe such a hypothetical arrangement of features.

Fifth, even if the Examiner’s position could be considered correct (which Applicant does not concede), such an analysis is irrelevant. The correct analysis, as explained above, is what one of skill would understand from the specification, not whether one particular embodiment of an infinite number of embodiments would or would not function with the claimed method. Further, one of skill, in view of the instant Application, would certainly be able to calculate the area necessary for cable clamping taking into consideration the shape of the cable clamp, whatever shape that might be.

III.(B) "Comparing An Inner-Diameter Area Of The Cable Clamp With The Area Necessary For Clamping The Cables" Is Fully Supported By The Specification As Filed

The Examiner takes the position that "[t]he method of comparing an inner-diameter area ... of the cable clamp with the area necessary for clamping the cables is not described," alleging that "the specifications [sic] do not disclose how to find the inner diameter area of an elongated rectangular cable clamp."

Applicant respectfully disagrees, for at least the following reasons. First, as noted above, the determination of an inner diameter area of any cable clamp shape is submitted to be well within the capability of one of skill. Further, the Examiner's conclusory statement that the comparative area method recited in the instant Application would not work an "elongated rectangular cable clamp" is unsupported by any analysis, so Applicant cannot comment on the Examiner's underlying rationale. Further, even if the Examiner's position could be considered correct (which Applicant does not concede), such an analysis is irrelevant. The correct analysis, as explained above, is what one of skill would understand from the specification, not whether one particular embodiment of an infinite number of embodiments would or would not function with the claimed method.

Second, Applicant directs the Examiner to, *inter alia*, the last full paragraph on page 10 of the specification, which indicates that "[t]he calculated area necessary for the clamping is then compared with the actual area corresponding to the inner-diameter of the cable clamp, thereby verifying whether the designated cable clamp can be used." Applicant respectfully submits that this portion of the specification adequately describes (*i.e.*, so that one of skill would understand) one embodiment of the invention in accordance with the claimed method.

III.(C) "Selecting One Or More Cable Clamps Suitable For The Area Necessary For Clamping The Cables" Is Fully Supported By The Specification As Filed

The Examiner takes the position that "[t]he method of selecting one or more cable clamps suitable for the area necessary for clamping the cables is not described," alleging that "the specifications [sic] appear to be silent about the process to select suitable cable clamps."

Applicant respectfully disagrees, for at least the following reasons. First the Examiner's conclusory statement that the specification is silent regarding the selecting method fails to support the instant rejection. Rather, the correct analysis, as explained above, is what one of skill would understand from the specification. In this instance, it is clear that any selecting process could be used, as long as the selecting is performed.

Second, Applicant directs the Examiner to, *inter alia*, the last full paragraph on page 10 of the specification, which indicates that "[t]he calculated area necessary for the clamping is then compared with the actual area corresponding to the inner-diameter of the cable clamp, thereby verifying whether the designated cable clamp can be used." Applicant respectfully submits that this portion of the specification adequately describes (*i.e.*, so that one of skill would understand) one embodiment of the invention in accordance with the claimed method.

III.(D) "Designating Control Points Assigned To A Portion Of Each Cable" Is Fully Supported By The Specification As Filed

The Examiner takes the position that "[t]he method of designating control points assigned to a portion of each cable is not described," alleging that "the specification describes a 3D CAD system, but the specification only provides description of 2D control points."

Applicant respectfully disagrees, for at least the following reasons. First, the Examiner's rejection is contradictory, as he seemingly alleges: (1) that the specification describes a 3D CAD

system; and (2) that it does not describe a 3D CAD system (as it “only” describes 2D control points).

Second, the independent claims recite “designating control points assigned to a portion of each cable affected by the cable clamp.” Thus, it is clear that the independent claims are not limited to either a 3D or 2D system of locating such control points, and the Examiner’s attempt to so limit the scope of the independent claims is improper. In fact, Applicant respectfully submits that it is within the scope of the instant Application to utilize such a 2D system, by which the processing described therein would be simplified.

Third, the Examiner’s conclusory statement that the specification is somehow deficient with respect to 3D data fails to support the instant rejection. The correct analysis, as explained above, is what one of skill would understand from the specification. In this instance, Applicant respectfully submits that one of skill would surely know how to assign 3D data or 2D data for control points based on the illustrative examples.

III.(E) “Generating A Complete Cable Form Based On The Cable Routing Position Data” Is Fully Supported By The Specification As Filed

The Examiner takes the position that “[t]he method of generating a complete cable form based on ... the cable routing position data ... is not described,” alleging that “the specifications [sic] appear to be silent about the meaning of a cable form.”

Applicant disagrees. As described below, a “cable form” is equivalent to a “cable routing,” or how the cable is routed through space. The complete cable form is created based upon the various claimed method steps in the independent claims.

IV. Indefiniteness Rejection

The Examiner has rejected claims 1, 2, 3, 6, 7 and 8 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

The Examiner first alleges that the term “cable form” used in these claims is indefinite. Applicant disagrees, and directs the Examiner, *inter alia*, to the first paragraph of the specification, which indicates that “[t]he present invention relates to a method of designing the form (or routing) of cables using a three-dimensional CAD (computer-aided design) system.” Thus, it is clear that the term “cable form” may be interchangeably used with “cable routing,” or how the cable is routed in space.

The Examiner next alleges that the term “reference position” is indefinite. Applicant disagrees, and directs the Examiner, *inter alia*, to pages 10 and 11 of the specification, which indicates that “control points in the cable routing are assigned to each cable, in advance,” and that “[e]ach control point indicates a reference position in the design of the cable routing.” Thus, Applicant respectfully submits that it is clear that the term “reference position” is equivalent to a point which the cable design passes through.

In view of the above, Applicant respectfully requests the withdrawal of the indefiniteness rejections of claims 1, 2, 3, 6, 7 and 8.

V. Obviousness Rejection

The Examiner has rejected claims 1-10 under 35 U.S.C. § 103(a) as being unpatentable over *Ferketic* (US 5,021,968; hereinafter “*Ferketic*”) in view of *Newton* (“*Intelligent Isometrics For 3D Piping Models In Support Of The Engineering Life Cycle*”; hereinafter “*Newton*”),

further in view of *Perrault* (US 6,452,095; hereinafter "*Perrault*"). This rejection is respectfully traversed.

The Examiner alleges that a combination of *Ferketic*, *Newton* and *Perrault* teaches or suggests all of the features recited in each of the independent claims 1, 2, 3, 6, 7 and 8.

Applicant respectfully disagrees, and submits that, even if it would have been possible to modify *Ferketic* in view of *Newton* and *Perrault* as the Examiner has alleged, neither *Ferketic*, *Newton* nor *Perrault* (nor any combination thereof) teaches or suggests many of the features recited in independent claims 1, 2, 3, 6, 7 and 8.

V. (A) "Calculating An Area Necessary For Clamping The Cables" Is Not Taught Or Suggested By The Applied References

Applicant respectfully submits that none of the applied references, either alone or in combination, teaches or suggests "calculating an area necessary for clamping the cables," as recited in each of the pending independent claims.

The Examiner alleges that *Ferketic*'s disclosure of a step of calculating a percent fill value for cables in a cable run is somehow equivalent to such a method. Applicant respectfully disagrees, and submits that *Ferketic*'s method is actually directly opposite to the claimed method.

Specifically, *Ferketic* discloses the calculation of a percentage of a cable run that is filled by cables laid therein based on the cable areas (col. 4, lines 34-39). Thus, *Ferketic* discloses a method of determining if a new cable can be fit into a particular cable run in which cables are already contained, based on the cross-sectional areas of the existing and new cables.

In contrast, the independent claims of the instant Application recite the calculation of an area necessary for clamping a particular arrangement of cables by calculating the cross-sectional area of each cable before the cables are contained in a cable clamp, and the calculation of an area necessary for clamping the cables based on a result of the calculation of the cross-sectional area. This is exactly opposite to the method disclosed in *Ferketic*, as *Ferketic* does not provide a particular arrangement of cables to be clamped, but rather provides a particular cable run that individual cables can be inserted into until it is filled. *Ferketic* does not provide a particular cable run based upon a particular wiring configuration.

Additionally, Applicant respectfully submits that *Newton* and *Perrault* are silent regarding any such area calculation.

V. (B) “Designating A Cable Clamp To Be Used From Among The Selected Cable Clamps” Is Not Taught Or Suggested By The Applied References

Applicant respectfully submits that none of the applied references, either alone or in combination, teaches or suggests “designating a cable clamp to be used from among the selected cable clamps,” as recited in independent claims 2, 3, 7 and 8.

Specifically, *Perrault* discloses the use of a single cable supporting bar 12. Nowhere does *Perrault* disclose any particular designation or selection of a particular cable clamp from a group of possible cable clamps, let alone a selection of such a cable clamp based on the calculation of any cross sectional area of any cables.

Additionally, Applicant respectfully submits that *Newton* and *Ferketic* are silent regarding any designation.

V. (C) "Adding Data Of Designated Control Point Assigned To A Portion Of Each Cable Affected By The Cable Clamp, To Data Of Control Points Of Each Cable Which Are Assigned To Each Cable In Advance" Is Not Taught Or Suggested By The Applied References

Applicant respectfully submits that none of the applied references, either alone or in combination, teaches or suggests "adding data of designated control point assigned to a portion of each cable affected by the cable clamp, to data of control points of each cable which are assigned to each cable in advance," as recited in independent claims 1, 2, 3, 6, 7 and 8.

Specifically, Applicant first submits that none of the applied references teach or suggest any particular use of "control points." Second, Applicant respectfully submits that there is no teaching or suggestion that the cables of *Ferketic* are arranged in view of first control points assigned to cables in advance, and other control points which are assigned based upon the affect of a cable clamp. In contrast, *Ferketic* only discloses the arrangement of cables in a cable run, with no particular recognition of any cable clamps, or the definition of control points in view of any cable clamps.

Additionally, Applicant respectfully submits that *Newton* and *Perrault* are silent regarding the use of any such control points.

Thus, Applicant respectfully submits that independent claims 1, 2, 3, 6, 7 and 8 are patentable over the applied references. Further, Applicant respectfully submits that rejected dependent claims 4, 5, 9 and 10 are: (1) allowable at least by virtue of their dependency; and (2) separately patentable over the applied references.

For example, Applicant respectfully submits that the applied references fail to teach or suggest claim 4's recitation that the cables where "the designated control points include points determined so that the cables pass perpendicularly through end faces of the cable clamp," or

claim 5's recitation where "the designated control points include points determined at positions away from each end face of the cable clamp by a minimum bend radius of each cable along the direction perpendicular to each end face."

Specifically, while the Examiner concedes that these features are not taught or suggested by *Ferketic* and/or *Newton*, he alleges that FIG. 2 of *Perrault* discloses such features. Applicant respectfully disagrees, and submits that it is unreasonable to take such a position based upon FIG. 2 of *Perrault*, as that Figure only shows the presence of supporting bar 12 and synthetic resin bands 34, but fails to specify their respective relationships. Specifically, it is improper for the Examiner to rely only upon a Figure of a reference to show specifically claimed dimensional or spatial relationships, as it has long been held that, "[w]hen the reference does not disclose that the drawings are to scale and is silent as to dimensions, arguments based on measurement of the drawing features are of little value. See *Hockerson-Halberstadt, Inc. v. Avia Group Int'l*, 222 F.3d 951, 956, USPQ2d 1487, 1491 (Fed. Cir. 2000); MPEP § 2125. *Perrault* fails to otherwise disclose any particular relationship between supporting bar 12 and synthetic resin bands 34.

Thus, Applicant respectfully requests that the Examiner withdraw this rejection.

VI. New Claims

Claims 11 and 12 are hereby added. Claims 11 and 12 are fully supported *at least* by pages 10, 15 and 17 of the instant Application. Claims 11 and 12 are respectfully submitted to be allowable both by virtue of their dependency, and by virtue of the features recited therein.

VII. Conclusion

In view of the foregoing, it is respectfully submitted that claims 1-12 are allowable. Thus, it is respectfully submitted that the application now is in condition for allowance with all of the claims 1-12.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Please charge any fees which may be required to maintain the pendency of this application, except for the Issue Fee, to our Deposit Account No. 19-4880.

Respectfully submitted,



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